Environmental and Public-Health Risks Associated with Industrial Swine Production

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Currently, the swine industry is moving further away from traditional methods of hog farming, adopting assembly-line methods of large-scale production where hog farms have metamorphosed into swine factories. In Oklahoma alone, the hog population has soared 761% from 1990 to 1998. Meanwhile, the number of hog operations nationwide has steadily declined from 3 million in the 1950s to 138,000 in 1998. Thus, instead of being spread out among family farmers, U.S. pork production is taking place in a concentrated fashion, creating numerous environmental health concerns. Odors, gases, and solid wastes emitted from these factories have drastically altered the quality of life in neighboring communities. In addition, occupational illnesses, such as asthma, bronchitis, toxic organic dust syndrome, hyperactive airway disease, and hydrogen sulfide intoxication have been reported.

This study investigated the environmental and public-health risks associated with industrial swine production. Literature searches and personal interviews were conducted to assess the issue. Findings revealed that the effects of these swine factories are far reaching. Besides the odor and gases, nearby residents have to cope with an increasing number of flies, rats, and other scavenging animals. Improperly managed manure wastes and pre-slaughterhouse carcasses also threaten the water quality in "hog communities." Moreover, the close proximity of humans to these facilities raises concerns that certain infectious diseases may cross over from hogs to humans. In addition, there is new evidence that the necessary use of antibiotics in industrial swine production could be contributing to the increase of antibiotic resistance in human pathogens.

Oftentimes, rural public health issues are overlooked. Meanwhile, the rate at which livestock production is shifting into an industrial process, regardless of the environmental, social, and public health consequences, is alarming. This study sought to shed light on this important rural issue as well as offer solutions regarding the ways in which environmental and public-health problems associated with industrial swine production may be remedied.

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